The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CARL J. DISTER

Appeal No. 2004-2306
Application No. 09/164,206

HEARD: February 9, 2005

Before FRANKFORT, MCQUADE, and NASE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Carl J. Dister appeals from the final rejection (mailed April 2, 2003) of claims 1 through 25, all of the claims pending in the application.

THE INVENTION

The invention relates to "packaging for a machine diagnostic system for on-line diagnosis of a dynamoelectric machine" (specification, page 1). Representative claims 1, 23 and 24 read as follows:

1. In combination, a dynamoelectric machine and a machine diagnostic system for on-line diagnosis of the machine;

the machine diagnostic system comprising a machine diagnostic module which collects data relating to operation of the machine and a package which is mounted to an outer mounting surface of the machine; and

the package comprising a container which contains the machine diagnostic module and a heat dissipation device, positioned between the container and the outer mounting surface of the machine, which dissipates heat generated by the machine into surrounding air thereby minimizing heat transfer to the container.

23. A package for a diagnostic module of a dynamoelectric machine comprising:

a container to contain the diagnostic module; and a heat dissipation device which includes a first set of fins, at least one of the fins having a base which engages an outer mounting surface of the machine and a tip which engages the container whereby heat is conducted through the base towards the tip and is transferred by convection into the surrounding air.[1]

24. A method for regulating temperature of a diagnostic module of a dynamoelectric machine, comprising the steps of:

containing the diagnostic module within a container; and

employing a plurality of fins to facilitate dissipating heat generated by the machine into surrounding air to minimize heat transfer to the diagnostic module, wherein at least one of the fins has a base which engages the outer mounting surface of the machine and a tip which engages the container whereby heat is conducted through the base towards the tip and is transferred by convection into the surrounding air.

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[1] Although the preamble of claim 23 indicates the claimed subject matter to be a diagnostic module package, the body of the claim recites a positive structural relationship between the package and a dynamoelectric machine ("at least one of the fins having a base which engages an outer mounting surface of the machine"). At the oral hearing, the appellant's counsel confirmed that the claim is drawn to a combination of the package and the machine.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Lakin et al. (Lakin)	4,840,222	Jun. 20, 1989
Wang et al. (Wang)	5,566,092	Oct. 15, 1996
Emori et al. (Emori)	5,940,272	Aug. 17, 1999
Hays et al. (Hays)	6,260,004	Jul. 10, 2001

THE REJECTIONS

Claims 1 through 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hays or Wang in view of Emori and Lakin.

Attention is directed to the main and reply briefs (filed October 9, 2003 and February 23, 2004) and the answer (mailed December 22, 2003) for the respective positions of the appellant and the examiner regarding the merits of this rejection.

DISCUSSION

Hays and Wang, the examiner's alternative primary references, disclose diagnostic systems for industrial machines. The examiner concedes that neither reference responds to the limitations in independent claims 1, 23 and 24 requiring the diagnostic module package, container and/or fins to be mounted on the machine.

Emori discloses a casing for accommodating a plurality of electric parts such as inverters, transformers and noise filters. The casing is designed to shield the parts against electromagnetic noise and to dissipate heat generated by the parts through a series of radiating fins.

Lakin discloses heat sink structures for mounting electronic control circuitry to an electric motor while protecting the circuitry from the deleterious effects of heat generated by the motor.

In proposing to combine Hays or Wang with Emori and Lakin to reject independent claims 1, 23 and 24, the examiner submits that

> [n]either Wang *et al.* nor Hays *et al.* specify that the monitoring electronics should be mounted upon the industrial equipment. The Examiner notes that it is well known to make integral that which was separate . . . . Because the devices of Hays *et al.*, Wang *et al.* and Lakin *et al.* are within the art of machine monitoring, because the device of Emori *et al.* is within the general art of electronics mounting, because it is known to monitor the operation of a rotating machine, because it is known that dynamoelectric machines generate heat which is harmful to electronics, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify either of Hays *et al.* or Wang *et al.* to include the mounting of the monitoring electronics within an arrangement as suggested by Emori *et al.*, with the monitoring electronics within a separate container while being attached to the device to be monitored, so

> as to receive the expected benefits derived therefrom such as increased heat insulation and increased resistance to EMF interference from the dynamoelectric machine [answer, page 3].

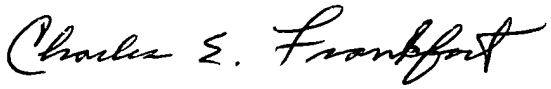
The only suggestion for this highly selective combination of the disparate teachings of Hays or Wang, Emori and Lakin stems from hindsight knowledge impermissibly derived from the appellant's disclosure. In short, the fair teachings of these references would not have suggested mounting the diagnostic systems disclosed by either Hays or Wang on the machines being monitored, let alone via the particular mounting arrangements required by claims 1, 23 and 24.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of independent claims 1, 23 and 24, and dependent claims 2 through 22 and 25, as being unpatentable over Hays or Wang in view of Emori and Lakin.

SUMMARY

The decision of the examiner to reject claims 1 through 25 is reversed.

REVERSED



CHARLES E. FRANKFORT)
Administrative Patent Judge)
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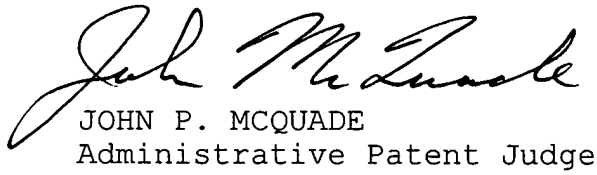
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